PATENT NO.

: 6,883,574 B2

APPLICATION NO.: 10/633926

DATED

: April 26, 2005

INVENTOR(S)

: Gregory M. Chapman

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

The Title Page showing an illustrative figure, should be deleted and substitute therefor the attached title page.

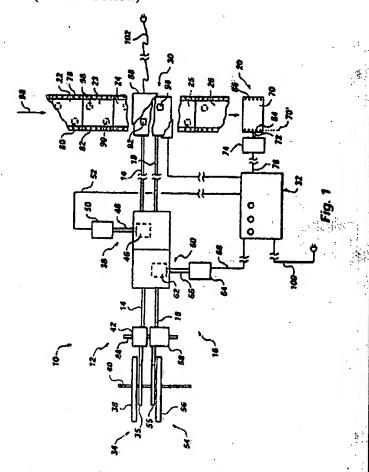
On the title page: Item (54) "Title",

change "APPARATUS FOR APPLICATION OF ADHESIVE TAPE TO SEMICONDUCTOR DEVICES" to --METHOD AND APPARATUS FOR APPLICATION OF ADHESIVE TAPE TO SEMICONDUCTOR DEVICES--

Page 1 of 9

In the drawings: In FIG. 1,

change existing lead line for reference numeral --86-- to accurately extend from teeth on right side of indexing roller 70 (As shown below)



PLEASE SCAN NEW

PAGE

ATTACHED

(NEW PAGE 9.49)

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DATED

- : April 26, 2005

INVENTOR(S)

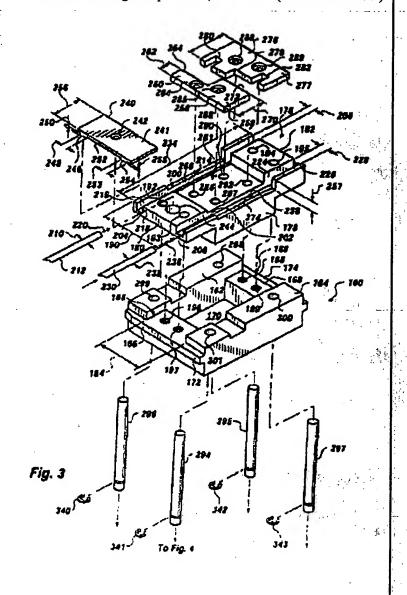
: Gregory M. Chapman

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In FIG. 3,

change-lowermost-second occurrence-of reference numeral "260" located below reference numeral 290 to --261--; add reference numeral -- 184-- and an appropriate lead line to indicate a distance change first occurrence of reference numeral "341" located below guide post 296, to --340-- (As shown below)

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: April 26, 2005

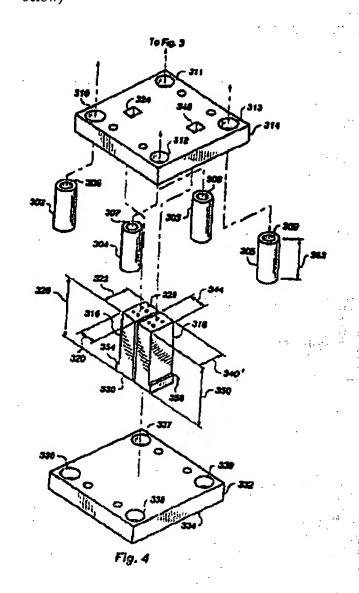
INVENTOR(S)

: Gregory M. Chapman

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In FIG. 4,

change reference-numeral "340" to --340'-- (As shown -----below)



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APPLICATION NO.: 10/633926 **DATED** 

: April 26, 2005

INVENTOR(S)

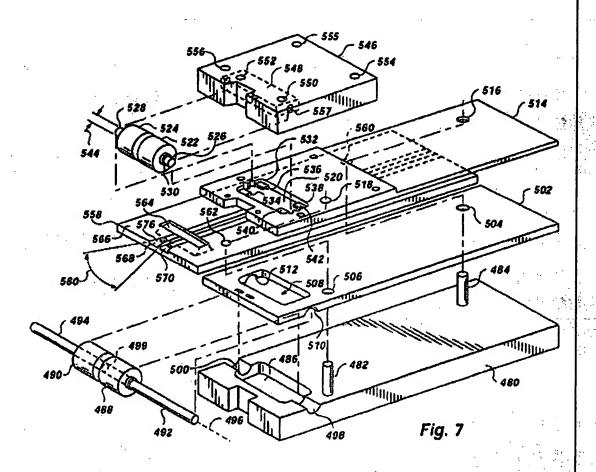
: Gregory M. Chapman

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In FIG. 7,

add reference numeral --562-- and associated lead line to aperture located left of reference numeral 540 (As shown

below)



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APPLICATION NO.: 10/633926

DATED

: April 26, 2005

INVENTOR(S)

: Gregory M. Chapman

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In FIG. 12,

add reference numeral --568-- and an appropriate lead line (As shown below)

Fig. 12

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DATED : April 26, 2005 INVENTOR(S) : Gregory M. Chapman

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In FIG. 13,

add reference numeral---592-- and an appropriate leadline (As shown below)

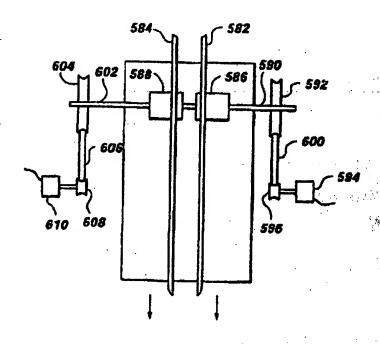


Fig. 13

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**DATED** 

: April 26, 2005

INVENTOR(S)

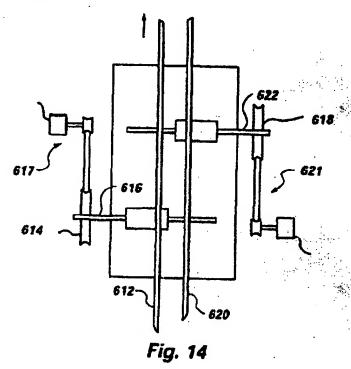
: Gregory M. Chapman

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In FIG. 14,

move existing reference numeral "618" and associated lead line to far right upper side of drawing, with lead line for --618-- extending from portion adjacent to 622; move existing reference numeral "614" and associated lead line to far lower left side of drawing, with lead line for --614-- extending from portion adjacent to 616; delete lead lines with out reference numerals (As shown below)

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COLUMN 1, LINE 1,

change "APPARATUS FOR APPLICATION OF ADHESIVE TAPE TO SEMICONDUCTOR DEVICES" to --METHOD AND APPARATUS FOR APPLICATION OF ADHESIVE TAPE TO SEMICONDUCTOR DEVICES--

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: 6,883,574 B2

DATED

: April 26, 2005

INVENTOR(S)

: Gregory M. Chapman

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 1, LINE 47,

change "lead-over-chip" to --lead-over-chip--

Page 8 of 9

COLUMN 7, LINE 52. after "die site" and before "of" insert --96--

COLUMN 9, LINE 20,

change "thought he" to --through the--

COLUMN 10, LINE 24,

change "show" to --shown--

COLUMN 11, LINE 8,

change "rear cross member" to --rear cross member

168--

COLUMN 13, LINE 57,

change "rings 341-343" to --rings 340-343--

COLUMN 13, LINE 59,

change "length 340" to --length 340'--

COLUMN 14, LINE 6,

change "340" to --340'--

COLUMN 14, LINE 8,

change "340" to --340'--

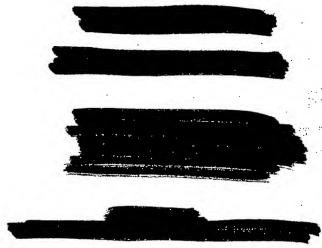
COLUMN 14, LINE 15,

change "bushings 302-315" to --bushings 302-305--

COLUMN 17, LINE 58,

change "along right" to --along the right--

This certificate supersedes certificate of correction 155vet March 3, 2009.





## US0068835

# (12) United States Patent

Chapman

(10) Patent No.:

US 6,883,574 B2

(45) Date of Patent:

Apr. 26, 2005

(54)	METHOD AND AL	PARATUS	FOR	
	APPLICATION OF	ADHESIVE	TAPE	TO
	SEMICONDUCTOR	DEVICES		

(75) Inventor: Gregory M. Chapman, Meridian, ID

(US)

(73) Assignee: Micron Technology, Inc., Boise, ID

(\*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: 10/633,926

(22) Filed: Aug. 4, 2003

(65) Prior Publication Data

US 2004/0026044 A1 Feb. 12, 2004

### Related U.S. Application Data

(60) Continuation of application No. 09/875,632, filed on Jun. 6, 2001, now Pat. No. 6,607,019, which is a continuation of application No. 09/330,794, filed on Jun. 14, 1999, now Pat. No. 6,267,167, which is a division of application No. 08/908,291, filed on Aug. 7, 1997, now Pat. No. 6,096,165.

	_	
(51)	Int. Cl. <sup>7</sup>	 B32B 31/00

(52) U.S. Cl. ...... 156/433; 156/511; 156/517; 156/521

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	6,607,019	B2	•	8/2003	Chapman 156/433

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\* cited by examiner

Primary Examiner—John T. Haran (74) Attorney, Agent, or Firm—TraskBritt

(57) ABSTRACT

A method and apparatus for application of adhesive tape to semiconductor devices are disclosed. A first adhesively coated tape material length is supplied to a first die associated with a cutting and application mechanism. A second length of adhesively coated tape material is also provided to a second die of the cutting and application mechanism. A plurality of LOC leadframes is supplied sequentially through the application structure to apply a first decal cut from the first tape material to a first die site at a first location and to apply a second decal cut from the second tape material to a second die site at a second location.

### 27 Claims, 13 Drawing Sheets

